










Date: Thursday, 17/08/2006 3:17:46 PM
User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: STEP EXTRUSION
Job Number	: 28215		
Estimate Number	: 10058		
P.O. Number	: N/A	Part Number	: D2622120C
This Issue	: 17/08/2006	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: D2622 REV C1
First Issue	: N/A	Project Number	: N/A
Previous Run	: 27153	Drawing Revision	: C1
	Type	Material	: N/A
	: PURCHASED PARTS	Due Date	: 15/09/2006
Written By	: <u>U</u>	Qty:	184
Checked & Approved By	: <u>U</u>	Um:	100 Each
Comment	: Est. A: 02.11.12 New Issue KJ/RF		
Additional Product			
Job Number: 			
Seq. #:	Machine Or Operation:	Description :	
1.0	PG	PURCHASING	
			
Comment: PURCHASING Issue P/O: <u>1874</u> a) Extrude as per Dwg D2622 Rev. C b) Material: 6061-T6 (QQ-A-200/8) c) Minimum yield tensile strength = 35 ksi d) Minimum ultimate tensile strength = 38 ksi e) Minimum elongation = 8% f) Order at 120" longg) Bon L Canada Inc. tool # 897123 Rev. A h) To be packed per DSK 066 i) Pull test to ASTM standard B221 required. j) Material certification is required			
2.0	D2622120CP	Extrusion	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 160.0000 Each(s) Extrusion			
3.0	PACKAGING 1	PACKAGING RESOURCE #1	
			
Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure material certification is attached			
4.0	QC6	DIMENSIONAL CHECK	
			
Comment: DIMENSIONAL CHECK Inspect dimension per Dwg D2622 Check Pull test per Dwg D2622 for compliance page attached Check hardness with Webster tester			

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/10/12
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: STEP EXTRUSION

Job Number: 28215

Part Number: D2622120C

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *PE*

PE 06.10.12

6.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SP 06/10/12

Job Completion



U 26.10.12

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

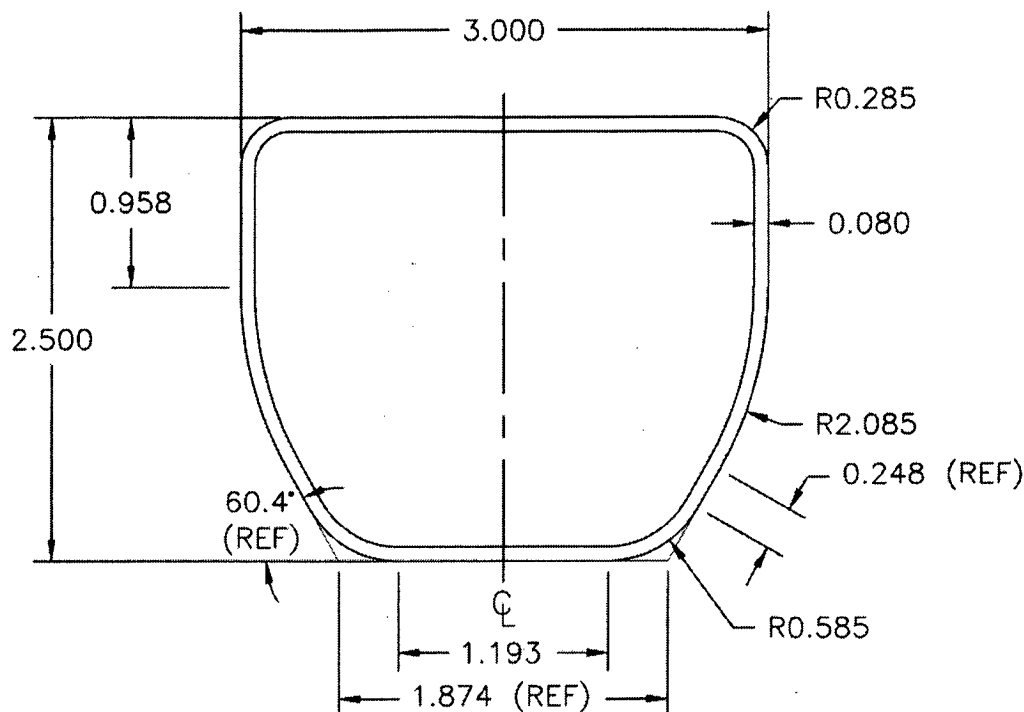
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date		Chief Eng	QC Inspector

NOTE: Date & initial all entries




DESIGN KE		DRAWN BY GP		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H		APPROVED H		DRAWING NO. D2622	REV. C SHEET 1 OF 1
DATE 02.09.11		TITLE STEP EXTRUSION			SCALE 1:1
A	96.11.29		NEW ISSUE		
B	97.12.12		CHANGE MATERIAL, ADD TOL. QSI		
C	02.09.11		0.080 WAS 0.085; ADD PART & DIE No.		
CI	H GP	02.10.04	ADD 'REV. A' TO DIE NUMBER.		

RELEASED
02.09.11 #



D2622-XXX STEP EXTRUSION

- 1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES (EG. D2622-120 IS 120" LONG)
- 2) MATERIAL 6061-T6 (QQ-A-200/8)
- 3) MANUFACTURED USING BON-L DIE # 897123 REV. A 

REFERENCE ONLY

- 4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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BON L CANADA INC

500 EDWARD AVENUE
RICHMOND HILL, ON L4C 4Y9

CERTIFICATE OF COMPLETION

Cert Date	Cert No	Sales Order	Page
10/09/06	148498	36474	1
Cust PO	B/L No	Lot	Date
1874	00321502	36474010	10/09/06

Sold To	Ship To
DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897123-1	120" Mill 6061 T6	D2622
Gross Weight	801 KGS		
Net Qty	759 KG	184 PC	561 M 3 PKG
Specification	AMS-QQ-A-200/8 & ASTM B221-00		

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/Drift HREW
1	366.9 / 53.2	322.8 / 46.8	9.6	.0	94

Chemical Analysis:

SI	FE	CU	MN	MG	CR	NI	ZN	GA	V	TI	ZR	OTHER
.65	.27	.26	.05	.89	.06	.007	.08	.000	.009	.02	.000	.00

This will certify that the material described herein has been inspected and tested in accordance with Bon L Canada's standard sampling and testing procedures or in accordance with the requirements of any specifications forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

Ritchie Bisnauth, QA Manager Signed for Bon L Canada